

West Michigan Transportation Operations Center

Serving Motorists on West Michigan Freeways

www.michigan.gov/its

www.michigan.gov/drive

April 2011



Suzette Peplinski, P.E.
1420 Front Avenue NW
Grand Rapids, MI 49504
PeplinskiS@michigan.gov

West Michigan TOC Control Room
E-mail: MDOT-GR-TRAFFOPS@michigan.gov
Phone: 616-451-8329
Fax: 616-774-9101

In the Spotlight



According to the National Weather Service, April 2011 was the second-wettest April on record with a total of 7 inches of rain. Measurable precipitation occurred on more than half of the days in April, including three days with more than 1 inch of rainfall.

Wet roads were possibly a factor in several crashes on Grand Rapids-area freeways during April. Of the 14 crashes that occurred at the crash hot spot locations (see page six), 11 crashes (78 percent) occurred during wet pavement conditions. The crash hot spot locations also were in areas where curves in the road may have played a factor. WMTOC operators posted more than 100 weather messages on the Dynamic Message Signs (DMS) throughout the Grand Rapids area to alert motorists to pavement conditions.

April also marked the beginning of several local construction projects. Some of the projects have relatively minor impacts to freeway traffic, especially when compared to 2010's major I-196 reconstruction project near downtown Grand Rapids. WMTOC operators communicated regularly with MDOT construction engineers during April, and used the information as a guide to post approximately 35 construction messages on Grand Rapids-area DMS. Wet weather in April caused a number of construction-related activities to be postponed.

In an effort to coordinate freeway and non-freeway construction projects, a May construction map is included in this report to identify the potential impacts between projects and the DMS that are being utilized to inform motorists of the construction impacts.

Compiled by:
URS

Control Room Hours of Operation

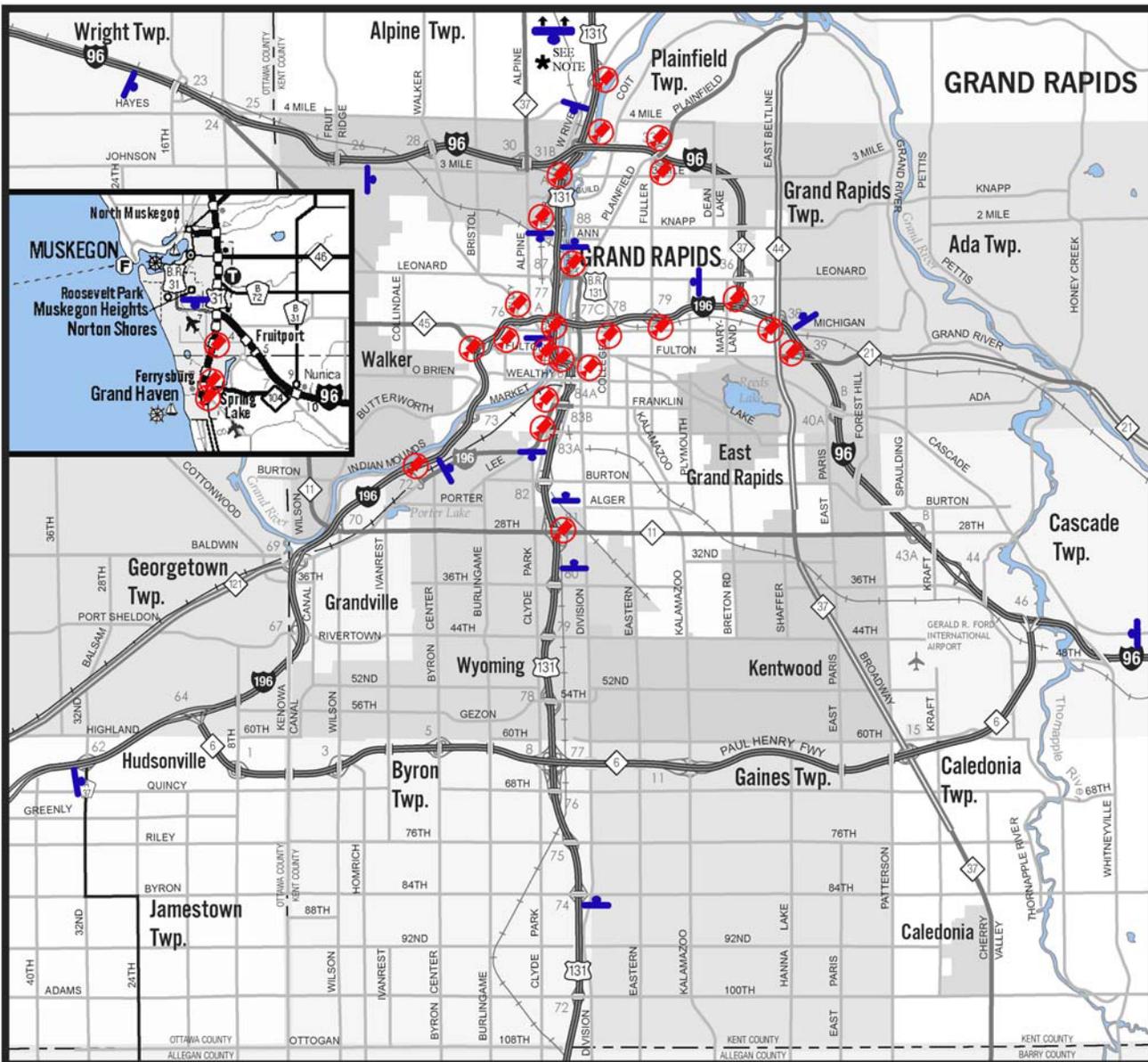
Time Period	Days	Hours
October – April	Monday – Friday	6 a.m. – 8 p.m.
	Saturday – Sunday	Noon – 8 p.m.
May – September	Monday – Thursday	6 a.m. – 8 p.m.
	Friday	6 a.m. – 9 p.m.
	Saturday – Sunday	Noon – 8 p.m.
Special Events	All	As needed
Holidays and Holiday Weekends	New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, Christmas	As needed

Control Room Contact Information

E-mail: MDOT-GR-TRAFFOPS@michigan.gov
 Phone: 616-451-8329
 Fax: 616-774-9101

PLEASE NOTE:
 The following report is limited to data collected within the ITS device coverage area during control room operation hours.

ITS Device Locations and Coverage Area



* DMS on South US-131 at Rockford Rest Area

Key:  Closed-circuit Television Camera
 Dynamic Message Sign

Summary

Data Key

April 2011

Communications Activity



Operators log all incoming and outgoing control room communications, engaging various incident responders and stakeholders.

Total Communication

Calls: 246
E-mails: 172

Quality Assurance/Quality Control



Quality assurance and quality control audit of format and content for incident notification communication and media traffic reporting.

Incident Notification

Format Correct 100.0%
Content Correct 96.4%

Unplanned Incidents



Operators log information about each unplanned incident including date/time, location, traffic impact, duration, and associated traveler information.

Total Incidents

75

Construction Activity



Operators maintain a list of ongoing construction projects and contacts for these projects. This activity also includes maintenance operations.

Incidents Occurring in Work Zones

0

Daily Shift Report



Operators track maintenance issues for all Intelligent Transportation Systems (ITS) equipment, including Closed-circuit Television (CCTV) cameras, Microwave Vehicle Detector Systems (MVDS), Dynamic Message Signs (DMS), and Variable Speed Signs (VSS).

System Availability

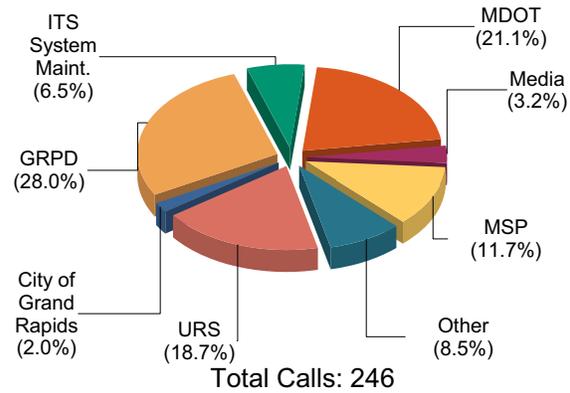
CCTV: 98%
MVDS: 76%
DMS: 99%
VSS: 93%

Calls and E-mails by Type

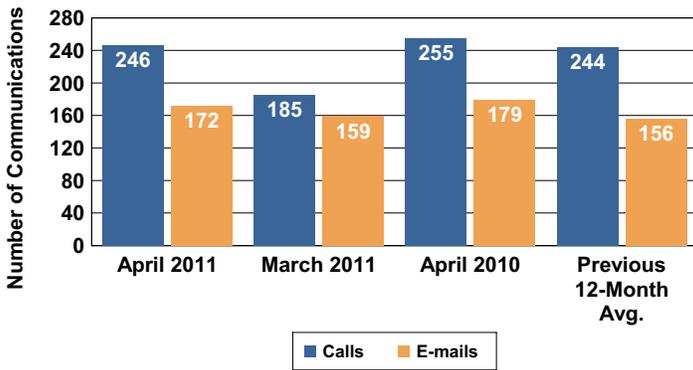


Agency	Calls			E-mails		
	In	Out	Total	In	Out	Total
City of Grand Rapids	2	3	5	17	0	17
Grand Rapids Police Department	5	64	69	0	0	0
ITS System Maintenance	5	11	16	0	0	0
Kent County Road Commission	1	1	2	0	0	0
Kent County Sheriff	4	2	6	0	0	0
Listserv	0	0	0	0	28	28
MDOT, Construction	10	12	22	2	0	2
MDOT, Maintenance	10	14	24	0	0	0
MDOT, Other	2	0	2	64	2	66
MDOT, Traffic/ITS	2	2	4	19	4	23
Media	6	2	8	0	0	0
Michigan State Police	14	15	29	1	1	2
Other	6	7	13	4	2	6
URS Corporation	33	13	46	8	3	11
Weather	0	0	0	17	0	17
Month Total	100	146	246	132	40	172

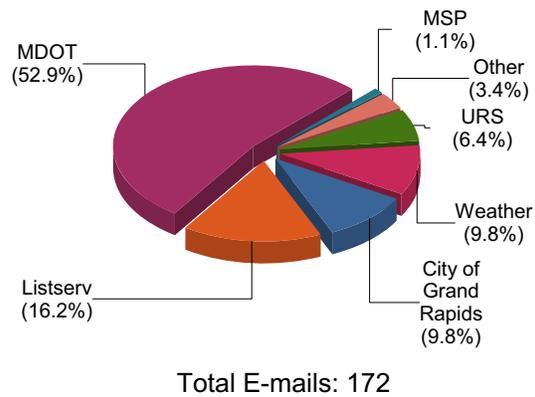
Calls by Type



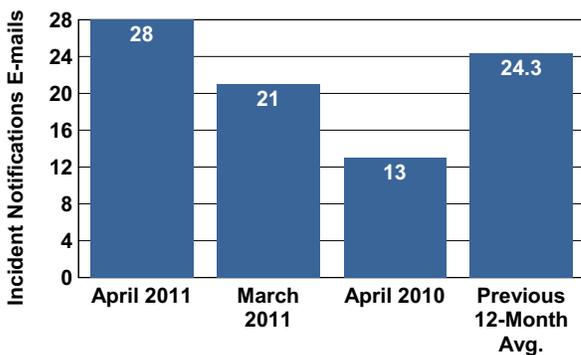
Communication History



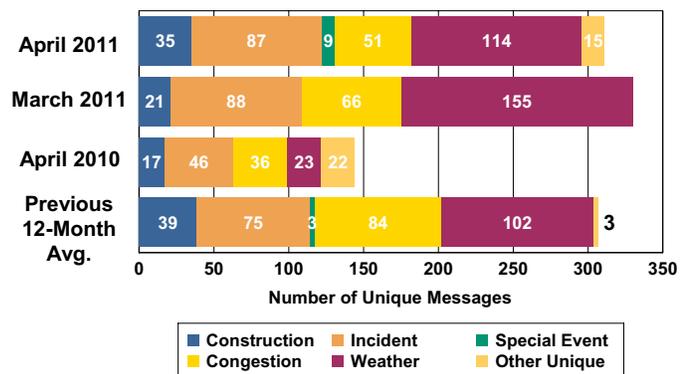
E-mails by Type



Incident Notification* History



DMS and VSS Messages by Type

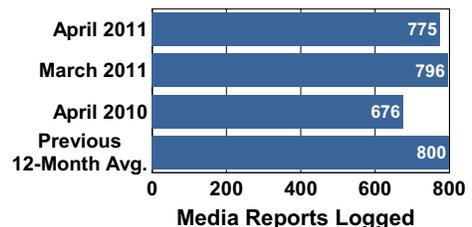


Incident Notification* Communication Accuracy



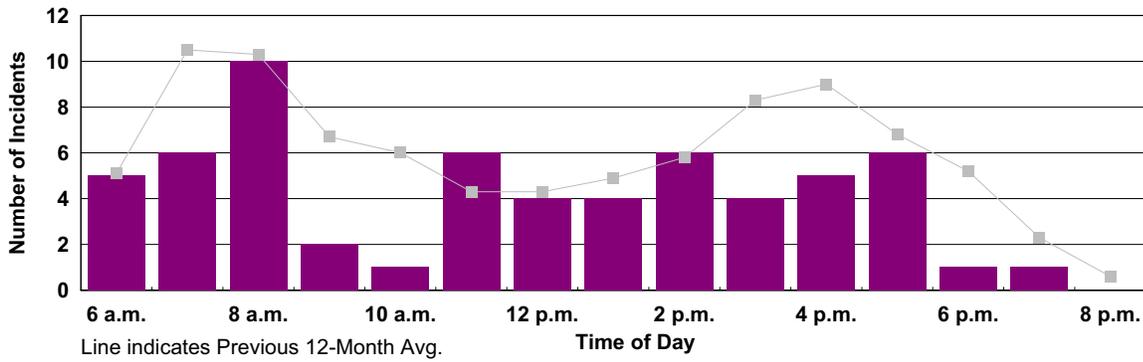
	April 2011	March 2011	April 2010	Previous 12 Months
Format Correct	100.0%	100.0%	100.0%	100.0%
Content Correct	96.4%	90.5%	100.0%	95.5%

Media Audits

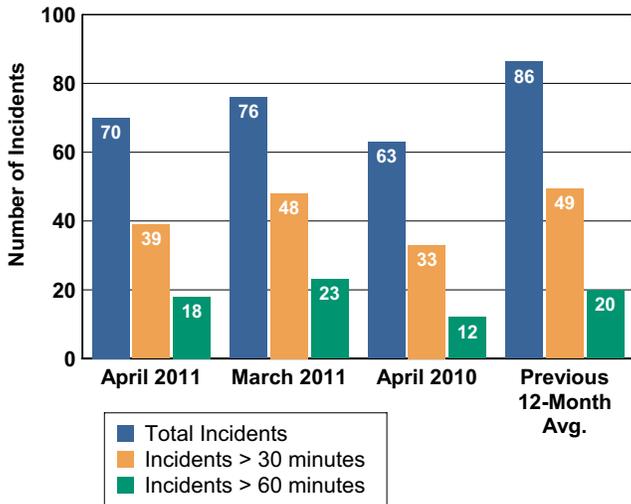


*Incident Notification e-mails are issued for high-impact incidents with an expected duration of 15 minutes or greater. To subscribe to this list, please send an e-mail to MDOT-GR-TRAFFOPS@michigan.gov.

Total of Unplanned Incidents per Weekday Hour

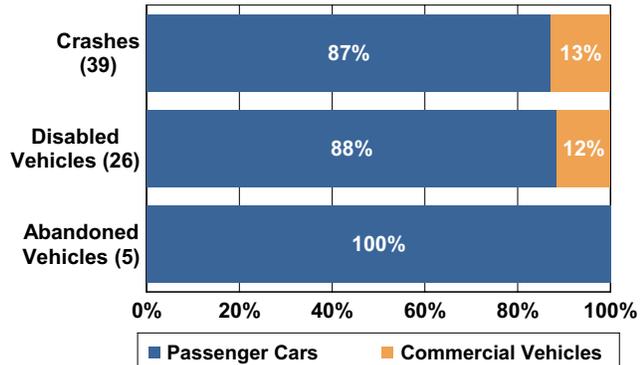


Incident Duration History*



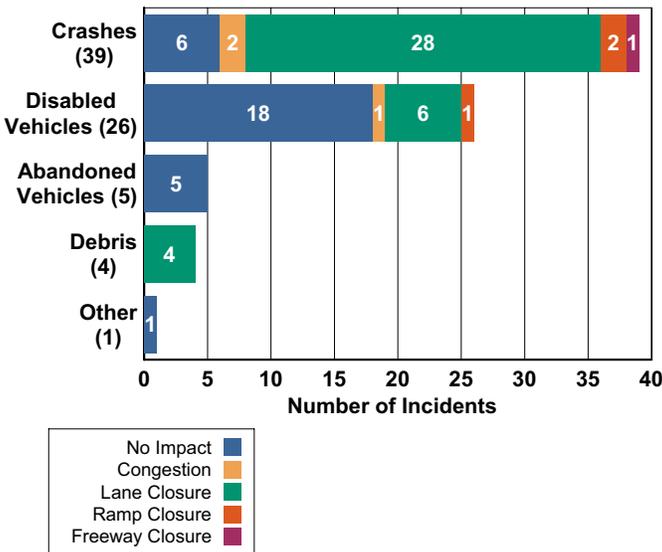
*Incident Duration History excludes abandoned vehicles.

Vehicle Composition of Incidents*



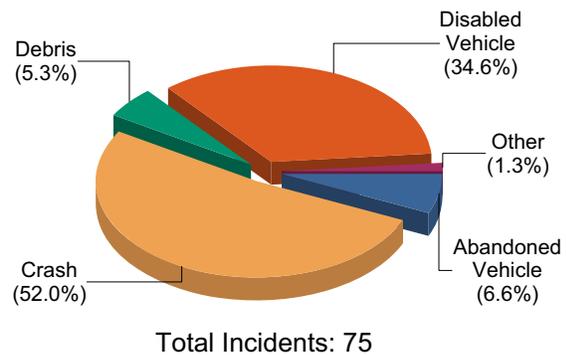
*Vehicle Composition of Incidents excludes incidents where vehicle types were not identified.

Traffic Impacts by Type*



*Traffic Impacts by Type may include incidents outside of the current WMTOC camera coverage area.

Incident Managed by Type*



*Incidents Managed by Type may include incidents outside of the current WMTOC camera coverage area.

Most Utilized DMS*

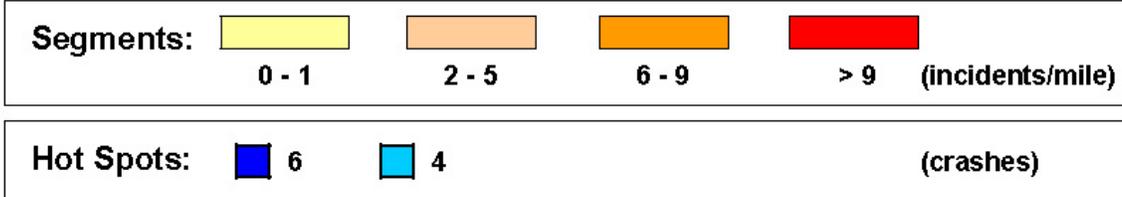


1. US-131 NB @ 28th St. (42)
2. US-131 NB @ 36th St. (36)
3. US-131 SB @ Pearl St. (27)

*Number of unique event messages.



Incident Density and Hot Spots Map



High-impact Unplanned Incident Activity*



Incident Impact	April 2011	March 2011	April 2010	Previous 12-Month Avg.
Lane Closure	38	29	13	29.2
Ramp Closure	3	4	1	3.6
Freeway Closure	1	2	2	2.3

*High-impact Unplanned Incident Activity includes unplanned incidents resulting in closures.

Unplanned Incidents by Roadway



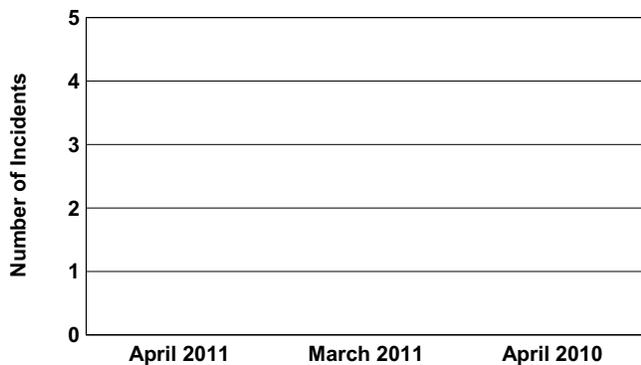
Freeway	April 2011		March 2011		April 2010		Previous 12-Month Avg.	
	Total	per mi.	Total	per mi.	Total	per mi.	Total	per mi.
I-96 (4.5 mi.)*	8	1.8	14	3.1	8	1.8	13.8	3.1
I-196 (8.5 mi.)*	15	1.8	18	2.1	9	1.1	18.1	2.1
US-131 (11 mi.)*	44	4.0	43	3.9	50	4.5	66.2	6.0
Month Total	67	2.8	75	3.1	67	2.8	98.1	4.1

* Reflects roadway mileage within the current WMTOC camera coverage area.

Incident Management



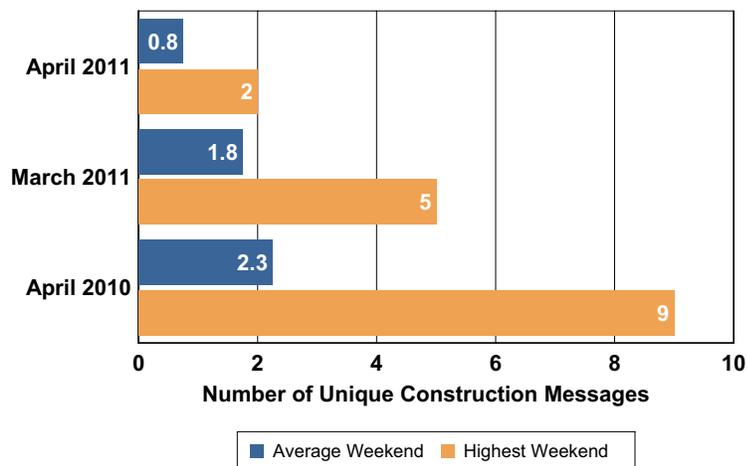
Incidents Occurring in Work Zones



Work Zone Incident Details:

During the month of April, there were no incidents identified by operators as being within work zones.

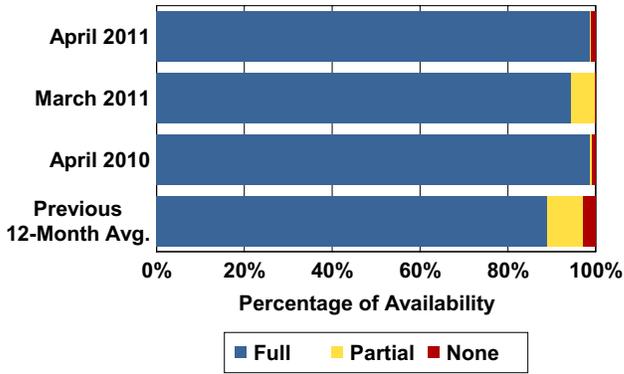
Weekend* Construction DMS Message Activity



* Friday, Saturday and Sunday.



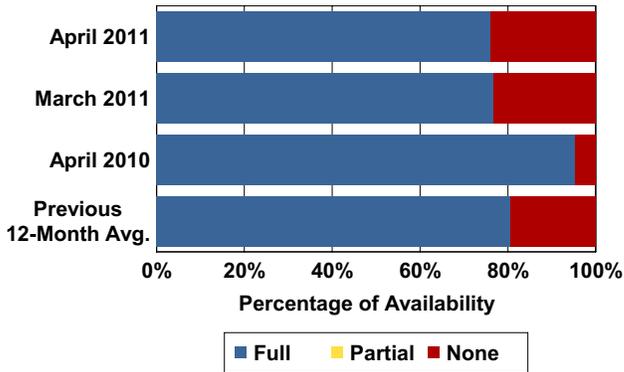
Overall CCTV Camera Availability



Individual CCTV Camera Availability

CCTV Cameras Below 95% Availability			
Location	Full	Partial	None
1. US-131 @ Hall St.	68%	6%	26%

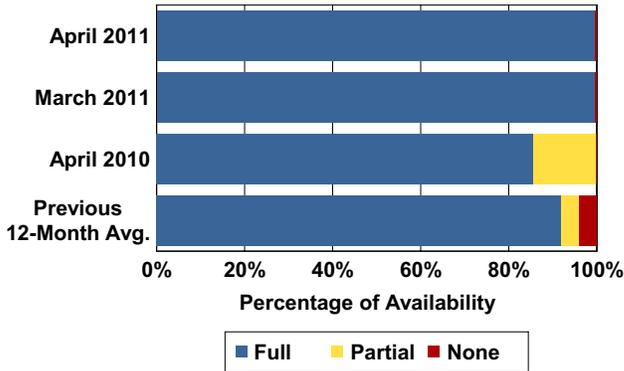
Overall Detector Availability



Individual Detector Availability

Vehicle Detectors Below 95% Availability			
Location	Full	Partial	None
1. 114N - I-196 @ Monroe	-	-	100%
2. 114S - I-196 @ Ottawa	-	-	100%
3. 119 -	-	-	100%
4. 125 - I-96 @ E. Beltline	-	-	100%
5. 201 - US-131 S of 36th	-	-	100%
6. 204 - US-131 S of 28th	-	-	100%
7. 205 - US-131 N of 28th	-	-	100%
8. 220 - I-196 W to US-131 N	-	-	100%
9. 224 - US-131 @ Ann	-	-	100%
10. 229 - US-131 S to I-96 E	-	-	100%
11. 210 - US-131 @ Hall	73%	-	28%

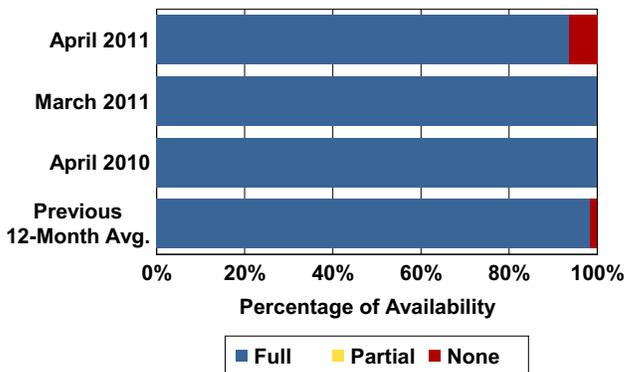
Overall DMS Availability



Individual DMS Availability

DMS Below 95% Availability			
Location	Full	Partial	None
None.			

Overall VSS Availability



Individual VSS Availability

VSS Below 95% Availability			
Location	Full	Partial	None
1. Pearl SB Speed Limit	78%	-	22%



Grand Rapids Area Construction Map - May 2011



*Includes construction projects on or near freeways and state trunklines.

MDOT

- Fuller Ave over I-196 bridge replacement
- Closures on Fuller Ave and I-196
- DMS used: EB I-196 @ Chicago Dr, WB I-96 @ Fulton St, SB US-131 @ Ann St

MDOT

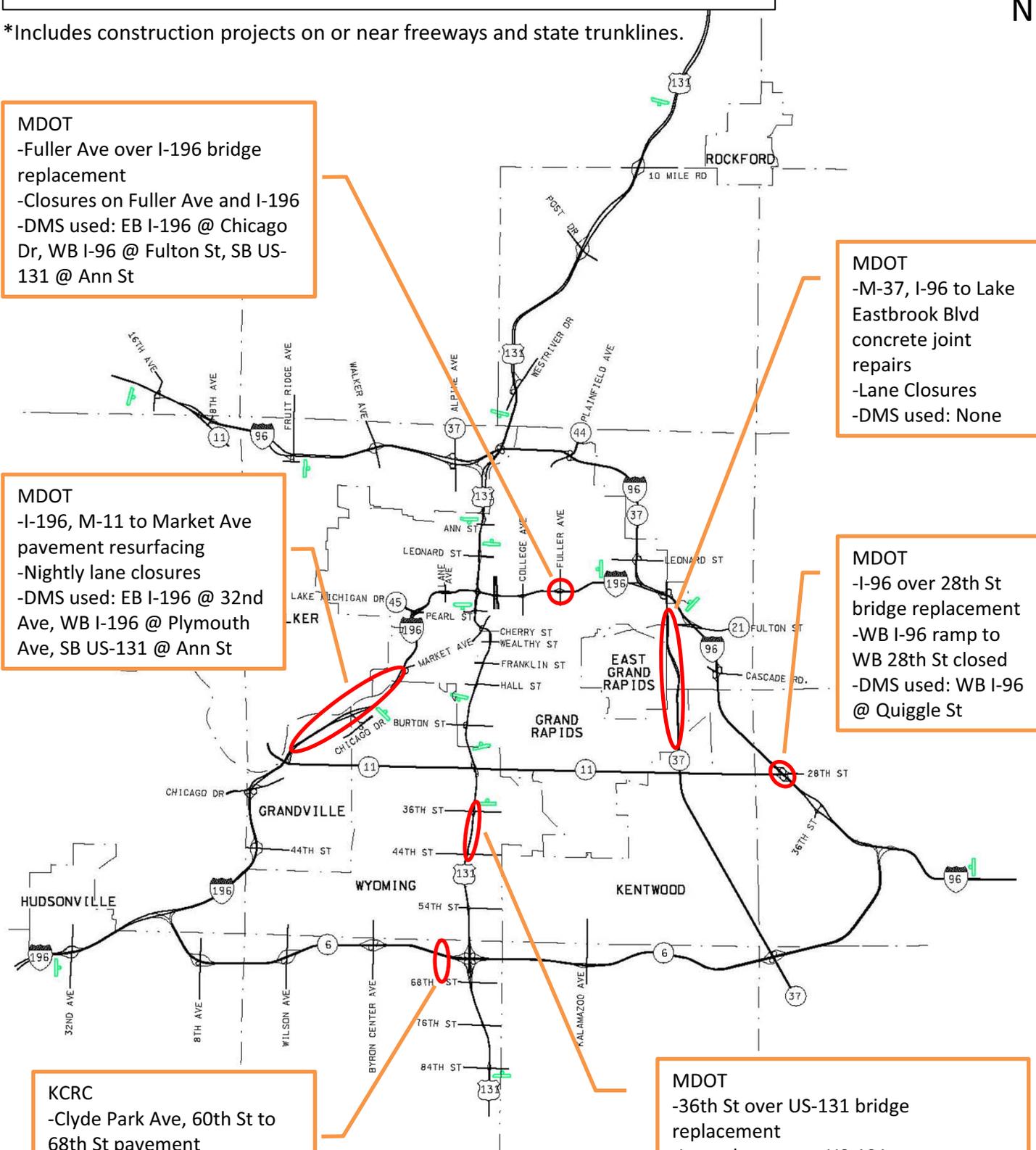
- M-37, I-96 to Lake Eastbrook Blvd concrete joint repairs
- Lane Closures
- DMS used: None

MDOT

- I-196, M-11 to Market Ave pavement resurfacing
- Nightly lane closures
- DMS used: EB I-196 @ 32nd Ave, WB I-196 @ Plymouth Ave, SB US-131 @ Ann St

MDOT

- I-96 over 28th St bridge replacement
- WB I-96 ramp to WB 28th St closed
- DMS used: WB I-96 @ Quiggle St



KCRC

- Clyde Park Ave, 60th St to 68th St pavement resurfacing
- Daily lane closures
- DMS used: None

MDOT

- 36th St over US-131 bridge replacement
- Lane closures on US-131
- DMS used: NB US-131 @ 84th St, SB US-131 @ Hall St